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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/509,073	08/22/2000	Bernd-Georg Pietras	MRKS/0012	5424

7590 02/25/2004

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Thomason Moser & Patterson
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EXAMINER	
GAY, JENNIFER HAWKINS	

ART UNIT	PAPER NUMBER
3672	Remail

DATE MAILED: 02/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	09/509,073	APPLETON ET AL.	
	Examiner	Art Unit	
	Jennifer H Gay	3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 November 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *15,16,26-28 and 30-48* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *15,16,26-28,30-41,43 and 45-48* is/are rejected.

7)☒ Claim(s) *42 and 45* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 15, 16, 26-28, 30-32, 34, 35, 38, 40, 41, 43, and 45-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Delano (US 4,100,968) in view of WO 98/11322 (previously cited).

Regarding claims 15, 16, and 40: Delano teaches a technique for running casing. The apparatus used in that technique includes the following features:

- A body (44, 46, and 48) connected to a top drive (42).
- A set of rigid gripping elements (126 and 128) that is radially displaceable to drivingly engage a tubular so the tubular (34) is threaded into another tubular (30) until adequately tightened. The gripping elements are disposed within the body and circumferentially spaced from one another in substantially the same axial plane. (See col. 2, lines 5-15)
- A sealing packer (186) that prevents fluid from escaping from the tubular. As seen in Figure 5, fluid traveling up the tubular would press the sides of the packer firmly against the inside wall of the tubular.

Delano discloses all of the limitations of the above claims except for the gripping element being radially displaced by hydraulic or pneumatic fluid directly applied thereto.

As seen in Figure 6, WO 98/11322 teaches a gripping element (11 and 15) that is radially displaced by the direct application of hydraulic fluid.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have applied hydraulic, or pneumatic, fluid directly to the gripping element, as taught by WO 98/11322, of Delano in order to have had direct

control over the amount of internal frictional connection between the element and the tubular (see page 5, paragraph 4, lines 8-10).

Regarding claims 26-28 and 41: The apparatus of Delano includes the following features:

- A body (44, 46, and 48) connected to a top drive (42).
- A set of rigid gripping elements (126 and 128) that is radially displaceable to drivingly engage a tubular so the tubular (34) is threaded into another tubular (30) until adequately tightened. (See col. 2, lines 5-15) The gripping elements are displaceable outwardly by pneumatic fluid (see col. 4, lines 20-25) and are located in a recess in the outer surface of body portion 44 (see Figure 3).
- A sealing packer (186) that prevents fluid from escaping from the tubular. As seen in Figure 5, fluid traveling up the tubular would press the sides of the packer firmly against the inside wall of the tubular.

Delano discloses all of the limitations of the above claims except for the gripping element being radially displaced by hydraulic or pneumatic fluid directly applied thereto.

As seen in Figure 6, WO 98/11322 teaches a gripping element (11 and 15) that is radially displaced by the direct application of hydraulic fluid.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have applied hydraulic, or pneumatic, fluid directly to the gripping element, as taught by WO 98/11322, of Delano in order to have had direct control over the amount of internal frictional connection between the element and the tubular (see page 5, paragraph 4, lines 8-10).

Regarding claim 31: The apparatus of Delano includes the following features:

- A top drive (42).
- A body having multiple sections (44, 46, and 48).
- Recesses disposed about the outer surface of the second section (46) and are disposed in the same axial plane to one another.

- A pair radially extendable gripping elements (168 and 170) are located in the recess (see Figure 4).

Though the gripping elements (168 and 170) shown in Figure 4 of Delano are not radially expandable with pressurized hydraulic or pneumatic fluid, the gripping elements (126 and 128) shown in Figure 3 are (see col. 4, lines 20-25). It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have been obvious to have used hydraulically or pneumatically actuated grippers as taught in column 4, lines 20-25 and Figure 3 for the gripping elements in Figure 4 in order to have used a gripping element that was more accurately controlled (see page 5, paragraph 4, lines 8-10 of WO 98/11322).

Delano discloses all of the limitations of the above claims except for the gripping element being radially displaced by hydraulic or pneumatic fluid directly applied thereto; the gripping elements 126 and 128 are not displaced by direct hydraulic or pneumatic pressure.

As seen in Figure 6, WO 98/11322 teaches a gripping element (11 and 15) that is radially displaced by the direct application of hydraulic fluid.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have applied hydraulic, or pneumatic, fluid directly to the gripping element, as taught by WO 98/11322, of Delano in order to have had direct control over the amount of internal frictional connection between the element and the tubular (see page 5, paragraph 4, lines 8-10).

Regarding claim 30: The first section, 44, includes a splined recess (see Figure 3) in which splined connecting members (126 and 128) are located.

Regarding claim 32: The gripping elements are radially extended to engage the inner walls of a tubular (34) (see col. 6, lines 5-20).

Regarding claim 34: The body is connected to the top drive (see Figure 1).

Regarding claim 35: The top drive rotates the body to provided rotational torque to all a screw connection between multiple tubulars (30 and 34). (See col. 2, lines 5-15)

Regarding claim 36: The apparatus of Delano discloses the following features:

- A body (44, 46, and 48) connected to a top drive (42).
- A set of rigid gripping element (126 and 128) that is radially displaceable from a plurality of recesses within the body by pneumatic fluid. The gripping element is used to drivingly engage a tubular so the tubular (34) is threaded into another tubular (30) until adequately tightened. (See col. 2, lines 5-15)
- A sealing packer (186) that prevents fluid from escaping from the tubular. As seen in Figure 5, fluid traveling up the tubular would press the sides of the packer firmly against the inside wall of the tubular.

Delano discloses all of the limitations of the above claims except for the gripping element being radially displaced by hydraulic or pneumatic fluid directly applied thereto.

As seen in Figure 6, WO 98/11322 teaches a gripping element (11 and 15) that is radially displaced by the direct application of hydraulic fluid.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have applied hydraulic, or pneumatic, fluid directly to the gripping element, as taught by WO 98/11322, of Delano in order to have had direct control over the amount of internal frictional connection between the element and the tubular (see page 5, paragraph 4, lines 8-10).

Regarding claims 38 and 43: The apparatus of Delano discloses the following features:

- A body (44, 46, and 48) connected to a top drive (42).
- A set of rigid gripping element (126 and 128) that is radially displaceable by pneumatic fluid. The gripping element is used to drivingly engage a tubular so the tubular (34) is threaded into another tubular (30) until adequately tightened. (See col. 2, lines 5-15)
- A sealing packer (186) disposed in a second recess on the outer surface of the body that prevents fluid from escaping from the tubular. As

seen in Figure 5, fluid traveling up the tubular would press the sides of the packer firmly against the inside wall of the tubular.

Delano discloses all of the limitations of the above claims except for the gripping element being radially displaced by hydraulic or pneumatic fluid directly applied thereto.

As seen in Figure 6, WO 98/11322 teaches a gripping element (11 and 15) that is radially displaced by the direct application of hydraulic fluid.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have applied hydraulic, or pneumatic, fluid directly to the gripping element, as taught by WO 98/11322, of Delano in order to have had direct control over the amount of internal frictional connection between the element and the tubular (see page 5, paragraph 4, lines 8-10).

Regarding claim 45 and 46: Delano discloses a method for manipulating tubulars that involves the following steps:

- Providing a gripping apparatus where the gripping apparatus includes the following features:
  - A body (44, 46, and 48) having a plurality of recesses spaced circumferentially around the body where the recesses are on the same axial plane.
  - A set of rigid gripping element (126 and 128) that is radially displaceable from the plurality of recesses within the body by pneumatic fluid.
- Radially expanding the gripping elements to engage the inner surface of a tubular (34) by the introduction of pressurized fluid to the elements (see col. 2, lines 5-15).
- Rotating the tubular with a top drive (42) connected to the body.
- Lowering the tubular into the wellbore while introducing fluid to the tubular.

Regarding claims 47 and 48: The tubular is sealing engaged by a sealing packer (186) disposed on the body. As seen in Figure 5, fluid traveling up the tubular would press the sides of the packer firmly against the inside wall of the tubular.

3. Claims 33, 37, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Delano (US 4,100,968) in view of WO 98/11322 (previously cited) as applied to claims 31 and 32 above, and further in view of Boyadejeff and Albright et al.

Delano and WO 98/11322 disclose all of the limitations of the above claims except for the casing support being carried by pneumatically operated weight-compensating pistons.

Boyadejeff teaches a tubing support system that includes compensating pistons.

Albright et al. teaches a weight compensation system that includes pistons that are controlled either hydraulically or pneumatically.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have used the tubing support system of Boyadejeff in conjunction with the weight compensating pistons of Albright et al. with the pipe connecting device of Delano in view of WO 98/11322 in order to have been able to use the device with pipes of various lengths, thus weights, without overloading the system (see col. 1, lines 60-65 of Albright et al.).

Allowable Subject Matter

4. Claims 42 and 44 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments filed 15 April 2003 have been fully considered but they are not persuasive.

In response to applicant's argument that Delano does not teach delivering fluid pressure directly to the inner surfaces of a plurality of gripping elements disposed within

a plurality of recesses within the body, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). The examine notes that WO 98/11322 was used to teach this feature and further notes that applicant is arguing Delano as a 35 USC 102 reference.

In response to applicant's argument that elements "168" and "170" of Delano are not actuated by fluid pressure, the examiner notes that these elements have not been indicated as fluid pressure actuated. The examiner has acknowledged that elements "168" and "170" are not fluid pressure actuated and, thus, has rejected claim 31 under 35 USC 103.

In response to applicant's argument that WO 98/11322 does not teach a plurality of rigid gripping elements disposed in substantially the same axial plane and within a plurality of recesses within the body, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). The examiner notes that WO 98/11322 has been used merely to teach that the direct application of fluid pressure to expand a gripping element is well known in the art.

In response to applicant's argument that the bellows (15) of WO 98/11322 could not be segmented to provide a plurality of gripping elements within a plurality of recesses disposed in substantially the same axial plane when substituted for slips "126' and "128" or tong dies "168" and "170" of Delano, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*,

642 F.2d 413, 208 USPQ 871 (CCPA 1981). The examiner notes that she is not suggesting replacing one system for the other but merely has used WO 98/11322 for the teaching of directly applying hydraulic pressure to an expandable gripping element.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer H Gay whose telephone number is (703) 308-2881. The examiner can normally be reached on Monday-Thursday, 6:30-4:00 and Friday, 6:30-1:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (703) 308-2151. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

David Bagnell
Supervisory Patent Examiner
Art Unit 3672

JHG
December 2, 2003